

[0018] In some embodiments, the pharmaceutical formulation comprises 60 mg/mL \pm 6 mg/mL antibody, 10 mM \pm 2 mM histidine, pH 6.3 \pm 0.3, 0.05% w/v \pm 0.025% polysorbate 20, 5% w/v \pm 1% sucrose, and 70 mM \pm 14 mM Arginine.

[0019] In some embodiments, after 56 days of storage at 40° C. and 75% relative humidity (RH), at least 90% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 30% of the antibody, or the antigen-binding portion thereof, is the main charge form.

[0020] In some embodiments, after 56 days of storage at 40° C. and 75% RH, at least 93% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 34.5% of the antibody, or the antigen-binding portion thereof, is the main charge form.

[0021] In some embodiments, after 56 days of storage at 40° C. and 75% RH, at least 97% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge form.

[0022] In some embodiments, after six months of storage at 25° C. and 60% RH, at least 90% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 40% of the antibody, or the antigen-binding portion thereof, is the main charge form.

[0023] In some embodiments, after six months of storage at 25° C. and 60% RH, at least 95% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge form.

[0024] In some embodiments, after six months of storage at 25° C. and 60% RH, at least 98% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 50% of the antibody, or the antigen-binding portion thereof, is the main charge form.

[0025] In some embodiments, after 12 months of storage at 2-8° C., at least 94% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 100% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0026] In some embodiments, after 12 months of storage at 2-8° C., at least 96% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 50% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 100% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0027] In some embodiments, after 12 months of storage at 2-8° C., at least 98% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 55% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 100% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0028] In some embodiments, after 18 months of storage at 2-8° C., at least 94% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 95% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0029] In some embodiments, after 18 months of storage at 2-8° C., at least 96% of the antibody, or the antigen-

binding portion thereof, has native conformation, at least 50% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 95% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0030] In some embodiments, after 18 months of storage at 2-8° C., at least 98% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 55% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 95% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0031] In some embodiments, after 24 months of storage at 2-8° C., at least 94% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 95% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0032] In some embodiments, after 24 months of storage at 2-8° C., at least 96% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 50% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 95% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0033] In some embodiments, after 24 months of storage at 2-8° C., at least 98% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 55% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 95% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

[0034] In another aspect, the present invention provides a pharmaceutical formulation comprising (a) 60 mg/mL \pm 10 mg/mL of an anti-human Activin A antibody, or antigen-binding portion thereof (b) 10 mM \pm 2 mM histidine, pH 6.3 \pm 0.3, (c) 0.05% \pm 0.025% polysorbate 20, (d) 70 mM \pm 14 mM Arginine, and (e) 5% \pm 1% sucrose, wherein the antibody, or the antigen-binding portion thereof, comprises a heavy chain variable region having at least 90%, at least 91%, at least 92%, at least 93%, at least 94%, at least 95%, at least 96%, at least 97%, at least 98%, at least 99% identity to, comprises, or consists of SEQ ID NO: 7 and a light chain variable region having at least 90%, at least 91%, at least 92%, at least 93%, at least 94%, at least 95%, at least 96%, at least 97%, at least 98%, at least 99% identity to, comprises, or consists of SEQ ID NO: 8. In one embodiment, the heavy chain comprises a sequence having at least 90%, at least 91%, at least 92%, at least 93%, at least 94%, at least 95%, at least 96%, at least 97%, at least 98%, at least 99% identity to, comprises, or consists of SEQ ID NO: 9. In one embodiment, the heavy chain comprises a sequence having at least 90%, at least 91%, at least 92%, at least 93%, at least 94%, at least 95%, at least 96%, at least 97%, at least 98%, at least 99% identity to, comprises, or consists of SEQ ID NO: 10.

[0035] In some embodiments, the formulation is contained in a container. In some embodiments, the container is a vial. In some embodiments, the vial is glass. In some embodiments, the glass is Type 1 borosilicate glass with a Fluro-Tec® coated 4432/50 butyl rubber stopper.

[0036] In some embodiments, the formulation is suitable for intravenous administration to a human subject in need